

Comparisons of Job Characteristics

Focus Occupation: **Mathematical Technicians (15-2091)**

Associated Occupation: **Actuaries (15-2011)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Mathematical Technicians (15-2091)

Associated Occupation: Actuaries (15-2011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mathematics	9.2	24.8	22.0	<	Expanded education and/or training may be required
Economics and Accounting	4.4	17.1	2.7	<<	Extensive education and/or training may be required
Computers and Electronics	8.4	15.9	14.4	<	Expanded education and/or training may be required
Administration and Management	8.4	12.3	4.6	<<	Extensive education and/or training may be required
Law and Government	5.9	10.8	2.1	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 63

Focus Occupation: Mathematical Technicians (15-2091)

Associated Occupation: Actuaries (15-2011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mathematics	6.2	17.2	20.5	>	Skill level is likely sufficient
Critical Thinking	10.8	16.4	18.0	0	Current skill level may be sufficient
Judgment and Decision Making	9.4	16.4	15.0	0	Current skill level may be sufficient
Complex Problem Solving	9.1	14.8	13.3	<	A higher skill level may be required
Systems Analysis	6.5	14.4	6.7	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	14.4	9.1	<<	Extensive development of skills in this area may be required

Management of Financial Resources	3.3	10.3	2.7	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	10.1	10.1	0	Current skill level may be sufficient
Programming	2.2	6.7	9.5	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 78

Focus Occupation: Mathematical Technicians (15-2091)

Associated Occupation: Actuaries (15-2011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematical Reasoning	6.3	17.3	23.0	>>	Current ability level is likely more than sufficient
Number Facility	6.3	17.0	21.8	>>	Current ability level is likely more than sufficient
Deductive Reasoning	10.6	15.5	15.5	0	Current ability level may be sufficient
Written Comprehension	11.0	15.2	7.6	<<	Extensive improvement in abilities may be required
Inductive Reasoning	10.2	14.5	5.9	<<	Extensive improvement in abilities may be required
Near Vision	11.1	14.1	8.8	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	12.6	7.8	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	12.0	5.1	<<	Extensive improvement in abilities may be required
Selective Attention	8.7	11.1	3.7	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Mathematical Technicians (15-2091)

Associated Occupation: Actuaries (15-2011)

Work Activities	Exclusivity of Activity
Analyze scientific research data or investigative findings	27
Communicate technical information	4
Compile numerical or statistical data	38
Create mathematical or statistical diagrams or charts	43
Develop or maintain databases	30
Develop tables depicting data	33
Explain complex mathematical information	30

Prepare reports	8
Use computers to enter, access or retrieve data	3
Use knowledge of investigation techniques	16
Use mathematical or statistical methods to identify or analyze problems	30
Use quantitative research methods	35
Use relational database software	26
Use spreadsheet software	18

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: n/a

Focus Occupation: Mathematical Technicians (15-2091)

Associated Occupation: Actuaries (15-2011)

Tools and Technologies

Exclusivity

Tools and technology data is unavailable for one or both occupations.

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.